



Course Outline

Phased Array (Advanced) 40 Hours

Duration: 5 Days (40 Hours)

Advanced Phased Array for Weld Inspection, Flaw Detection and Sizing, Scan Planning and Technique Development.

The following outlines the material to be discussed:

- Advanced Phased Array Theory Uses and Application
- Codes and Standards: UT in Lieu of RT
- PA Probe set ups using the grouping feature
 - Combined Linear and Sectorial Scanning
- Phased Array Ultrasonic Data Evaluation
- Phased Array Transducer Applications for Weld Inspection
- Advanced Calibration of a Phased Array System (OmniScan) using the Grouping Feature
- Phased Array Scan Planning Methods and Techniques
 - Cross Sectional Plotting Views
 - Multiple Beam Angle Projections
 - Weld and HAZ Volume Coverage per Codes and Standards
- Advanced Weld Examinations
 - Flaw Detection
 - Flaw Characterization
- Encoded Phased Array Scanning and Weld Examination Applications
- Advanced Phased Array Data Analysis
 - Evaluation of A, B C, S Scans for Flaw Characterization
 - Sectorial Scans
 - Linear Scans
- Electronic Report Preparation within the OmniScan
- Hands-on Phased Array Examination Laboratory Exercises
- Weld Flaw Examination

Notes:

- This program is suited for UT inspectors.
- The course has 8 hours of Phased Array theory and 32 hours of practical exercises and applications in Flaw Detection and Sizing.
- It is recommended that participants be certified to Level II or Level III with experience in UT Flaw Detection

Prerequisite: Successful completion of Phased Array (Basic) Course